

ABSTRACT OF THE DISCLOSURE

A metal conductor is provided with a cured coating of about 2.5  $\mu\text{m}$  to about 500  $\mu\text{m}$  thickness, which cured coating has a dielectric dissipation factor (60Hz, 24°C) of lower than about 0.05 and is a radiation-cured coating formulated from components comprising: a) an acrylate functional urethane oligomer having a hydrocarbon backbone; b) one or more mono- or polyfunctional diluents; and optionally, c) one or more light sensitive radical generating compounds. The invention further provides a radiation-curable coating composition for coating a metal conductor. Also disclosed is a method of making a metal conductor provided with a cured coating of about 2.5  $\mu\text{m}$  to about 500  $\mu\text{m}$  thickness, which cured coating has a dielectric dissipation factor (60Hz, 24°C) of lower than about 0.05.